ABSTRACT OF THE DISCLOSURE

A phase drift compensation scheme for multi-carrier systems. According to the invention, a timing offset compensator is provided to compensate for a timing offset in a current symbol after taking an N-point FFT. Then a phase estimator computes a phase estimate for the current symbol based on a function of a channel response of each pilot subcarrier, transmitted data on each pilot subcarrier, and a timing compensated version of the current symbol on the pilot subcarrier locations. From the phase estimate, a tracking unit can generate a phase tracking value for the current symbol. Thereafter, a phase compensator uses the phase tracking value to compensate the timing compensated version of the current symbol for the effect of phase drift.